

Montana Department of Natural Resources and Conservation  
Water Resources Division  
Water Rights Bureau

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

Note: Instructions to DNRC staff for preparing this EA can be found at:  
[http://www.dnrc.state.mt.us/eis\\_ea.html](http://www.dnrc.state.mt.us/eis_ea.html)

**Part I. Proposed Action Description**

1. *Applicant/Contact name and address:* Knife River Inc.  
4800 Wilkie Rd.  
Missoula, MT 59808
  
2. *Type of action:* Application For Beneficial Water Use Permit 76M 30062977
  
3. *Water source name:* Groundwater
  
4. *Location affected by project:* NESE Section 13, T13N R20W, Missoula County
  
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

The applicant proposes to divert groundwater by means of an open pit gravel mine, from March 15 to November 30 annually at 2000 GPM up to 814 AF, from a point in the SENESE of Section 13, T13N, R20W, Missoula County, for industrial use from March 15 to November 30 annually. The proposed industrial use is gravel washing. The place of use is generally located in the SENESE of Section 13, T13N, R20W, Missoula County, just west of the City of Missoula.

If the applicant meets the criteria for issuance of a Beneficial Water Use Permit as outlined in MCA 85-2-302, DNRC will issue the permit.

The focus of this environmental analysis is on the use of groundwater for gravel washing only. This environmental analysis does not address impacts from actual mining activity on the Applicant's property. Open pit gravel mining is not within the jurisdiction of the DNRC Water Resources Division.

6. *Agencies consulted during preparation of the Environmental Assessment:*  
*(include agencies with overlapping jurisdiction)*

Montana Natural Heritage Program  
State Historical Preservation Office  
Montana Department of Fish, Wildlife and Parks Website  
Montana Department of Environmental Quality Website

**Part II. Environmental Review**

**1. Environmental Impact Checklist:**

<b>PHYSICAL ENVIRONMENT</b>
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**WATER QUANTITY, QUALITY AND DISTRIBUTION**

**Water quantity** - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

*Determination:* No impact.

N/A the source of water is groundwater.

**Water quality** - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

*Determination:* No significant impact.

N/A the source of water is groundwater.

**Groundwater** - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

*Determination:* No significant impact.

The applicant proposes to divert groundwater by means of an open pit gravel mine, from March 15 to November 30 annually at 2000 GPM up to 814 AF, from a point in the SENESE of Section 13, T13N, R20W, Missoula County, for industrial use from March 15 to November 30 annually. The proposed industrial use is gravel washing. The place of use is generally located in the SENESE of Section 13, T13N, R20W, Missoula County, just west of the City of Missoula. Of the requested 814 AF diverted volume, 810 AF will return directly to the source via an open ditch, approximately 295 feet long, from the wash plant back to the open pit gravel mine from which water is initially diverted. The consumptive use of the proposed project is 4 AF.

Drawdown of the local shallow groundwater aquifer outside of the applicant's property boundary is modeled to be less than 0.04 inches. Drawdown of this magnitude will not impact groundwater quality or supply. Consumptive use of 4 AF will result in a 4 AF depletion to the Clark Fork River over the 261 day period of diversion and use. This amount of depletion over 261 days results in a depletion rate of 3.46 gpm. Depletion of 3.46 gpm will not impact surface water flows in the Clark Fork River.

**DIVERSION WORKS** - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

*Determination:* No impact.

The means of diversion will consist of an electric pump placed on floats in an excavated pit/gravel mine. The gravel mine will be excavated in an existing pasture. No excavation or other work will be conducted in any stream channel or riparian area that could result in an impact to channels or barrier to fish migration. The limited consumptive use and minimal aquifer drawdown will not impact future well construction in the area.

**UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

**Endangered and threatened species** - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

*Determination:* No impact.

The Montana Natural Heritage (MNH) database was queried to determine if any threatened or endangered species, or species of special concern, are located in the project vicinity. According to MNH, the following sensitive species were identified as occurring in the same township and range as the proposed project site; Obscure Evening Primrose, Fringed Myotis, Zapada Cordillera, Westslope Cutthroat Trout and Bull Trout.

The location of the Obscure Evening Primrose observed is several miles east of the project site in the foothills that surround the Missoula Valley. It is not known whether it exists at the project site. The project site is irrigated pasture historically grazed by livestock. This would greatly reduce the likelihood of the plant species existing on the applicant's property.

Fringed Myotis was also identified as occurring in Southeast Missoula. This small bat like mammal is considered rare, and threatened. It is not known whether Fringed Myotis use the applicant's property.

Sensitive species found occurring in streams in the Missoula Valley, such as Zapada Cordillera, Westslope Cutthroat Trout and Bull Trout should not be impacted by the applicant's proposed use of groundwater. The gravel washing operation will not affect surface water flows in the Clark Fork River, and there will be no outlets from the ponds that will allow water to leave the ponds, or that could allow fish to migrate to and from the ponds.

**Wetlands** - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

*Determination:* No impact.

The proposed project does not involve any wetlands.

**Ponds** - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

*Determination:* No impact.

The proposed project does not involve any ponds. The proposed open pit gravel mine will create a pond; however the Applicant does not propose any beneficial use for the pond and is not applying for a water right for use of the pond other than as a point of diversion for a gravel wash plant.

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

*Determination:* No impact.

The use of groundwater for gravel washing will not result in application of water to soils that may cause a degradation of soil quality, alteration of soil stability or moisture content. Soils at the site are not heavy in salts that could cause saline seep. The focus of the environmental analysis is the use of groundwater for gravel washing only. The proposed gravel mine will alter soils at the site by mining and excavation however the act of mining is not the jurisdiction of the DNRC Water Resource Division and this environmental analysis does not address impacts to soils from mining activity.

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

*Determination:* No impacts.

Existing vegetative cover consists of irrigated pasture. Existing vegetative cover will be removed during mining operations and converted to open water (gravel pit/pond). Noxious weeds can become established in areas where soil disturbance occurs. The project site is located on private property, and the control of noxious weeds is the landowner's responsibility.

**AIR QUALITY** - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

*Determination:* No impact.

No source of air pollutants was identified.

**HISTORICAL AND ARCHEOLOGICAL SITES** - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

*Determination:* No impacts.

The only recorded historic site within Section 13, T13N, R20W, is the Chicago, Milwaukee, St. Paul & Pacific Railroad bed. This site will not be altered as a result of issuance of the Beneficial Water Use Permit.

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** - Assess any other impacts on environmental resources of land, water and energy not already addressed.

*Determination:* No significant impact.

## HUMAN ENVIRONMENT

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

*Determination:* No impact.

There are no locally adopted environmental plans or goals. The proposed project will maintain the rural appearance of the applicant's property.

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

*Determination:* No impacts.

The project site is private property with limited recreational opportunities for the public. No wilderness areas will be impacted by the proposed water use.

**HUMAN HEALTH** - Assess whether the proposed project impacts on human health.

*Determination:* No significant impact.

The ponds may contribute habitat suitable for mosquito reproduction. West Nile Virus may be a concern, however, do to occasional flooding and high groundwater, mosquito habitat already exists on the applicant's property.

**PRIVATE PROPERTY** - Assess whether there are any government regulatory impacts on private property rights.

Yes \_\_\_ No XX If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

*Determination:* No impact.

**OTHER HUMAN ENVIRONMENTAL ISSUES** - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No impact.
- (b) Local and state tax base and tax revenues? No impact.
- (c) Existing land uses? No impact.
- (d) Quantity and distribution of employment? No impact.
- (e) Distribution and density of population and housing? No impact.
- (f) Demands for government services? No impact.
- (g) Industrial and commercial activity? No impact.
- (h) Utilities? No impact.
- (i) Transportation? No impact.
- (j) Safety? No impact.
- (k) Other appropriate social and economic circumstances? No impact.

**2. Secondary and cumulative impacts on the physical environment and human population:**

Secondary Impacts None identified.

Cumulative Impacts None identified.

**3. Describe any mitigation/stipulation measures:** None identified.

**4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:** None identified.

**PART III. Conclusion**

**1. Preferred Alternative** None identified.

**2. Comments and Responses**

**3. Finding:**

Yes \_\_\_ No XX Based on the significance criteria evaluated in this EA, is an EIS required?

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:* AN EA IS THE APPROPRIATE LEVEL OF ANALYSIS FOR THE PROPOSED ACTION BECAUSE NO SIGNIFICANT IMPACTS WERE IDENTIFIED.

*Name of person(s) responsible for preparation of EA:*

*Name:* Jim Nave

*Title:* Water Resource Specialist

*Date:* February 20, 2013